

NITRATE ELECTRODE METHOD**SM 4500-NO₃⁻D-2000 (2011)**

ADDITIONAL QC REQUIREMENTS FOR THIS METHOD: Certified or Accredited laboratories using this method are assessed to applicable requirements of SM 1020 and SM 4020.

Facility Name: _____ VELAP ID: _____

Assessor Name: _____ Analyst Name: _____ Inspection Date: _____

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst: _____					
Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____					
Were unpreserved samples stored as follows? <i>Nonpotable: ≤ 6°C up to 48 hours</i> <i>Drinking water: 4°C up to 48 hours unless chlorinated, which can be held up to 14 days</i>	40CFR 136.3, 40CFR 141.23				
When NO ₃ ⁻ and NO ₂ ⁻ were determined as separate species, were samples never acidified?	NO ₃ ⁻ A.2				
Did buffer solution contain Ag ₂ SO ₄ , sulfamic acid, Al ₂ (SO ₄) ₃ , and a buffer at pH 3?	NO ₃ ⁻ D.3.d				
Was the pH meter capable of 0.1 mV resolution?	NO ₃ ⁻ D.2.a				
Was the outer chamber of the reference electrode filled with (NH ₄) ₂ SO ₄ ?	NO ₃ ⁻ D.2.b				
Were the manufacturer's instructions followed for the care and storage of the nitrate ion electrode?	NO ₃ ⁻ D.2.c				
Was 10 mL buffer added to 10 mL of sample/standard in a 50 mL beaker and stirred with a magnetic stirrer?	NO ₃ ⁻ D.4.a/b				
Were electrode tips allowed to stabilize in solutions about 1 minute prior to the recording of millivolt readings?	NO ₃ ⁻ D.4.a/b				
Were electrode tips rinsed and blotted dry between samples?	NO ₃ ⁻ D.4.a				
Were calibration curves made by semilogarithmic plots with concentration on the logarithmic axis and millivolt responses on the linear axis?	NO ₃ ⁻ D.4.a				
Were calibration slopes +57 ± 3 mV/decade at 25°C?	NO ₃ ⁻ D.4.a				
Were samples and standards measured at approximately the same temperature?	NO ₃ ⁻ D.4.b				

Notes/Comments: